

What is claimed is

1. (Currently Amended) A method comprising:

receiving a packet at a packet forwarding device in a stack of packet forwarding devices, wherein the packet is received from a source device external to the stack;

at the packet forwarding device that received the packet from the source device, processing the received packet to:

identify a destination device external to the stack of packet forwarding devices, and

determine whether at least one other packet forwarding device is to receive the packet before reaching the identified destination device; and

when detecting that the at least one other packet forwarding device in the stack is to receive the packet before reaching the identified destination device, inserting a vector in [[a]] the received packet, wherein the vector includes data that identifies a ~~first~~ the identified destination device and the at least one other packet forwarding device in [[a]] the stack of packet forwarding devices to receive the packet.

2. (Currently Amended) The method of claim 1 further comprising:

using the inserted vector and a table to determine a port for sending the received packet to the at least one other packet forwarding first device in the stack of packet forwarding devices.

3. (Currently Amended) The method of claim 2 further comprising:

copying the received packet; and  
\_\_\_\_\_[[for]] sending the copy of the received packet through the at least one other packet forwarding device in the stack of packet forwarding devices ~~a second port identified by using the vector and the table.~~

4. (Currently Amended) The method of claim 1 wherein inserting the vector comprises inserting the data that includes a data bit identifying each of the at least one other packet forwarding first device in the stack of packet forwarding devices to receive the packet.

5. (Currently Amended) The method of claim 1 further comprising:

removing the inserted vector from the received packet

before [[for]] sending the packet to a ~~second~~ the destination  
device external to the stack of packet forwarding devices.

6. (Currently Amended) The method of claim 1 ~~wherein~~ further  
comprising:

forwarding the received packet to the at least one other  
packet forwarding device that comprises the first device  
~~includes a router.~~

7. (Currently Amended) The method of claim 1 further  
comprising:

modifying the vector to identify which of the at least one  
other packet forwarding device has already received the packet  
~~wherein the vector includes bits respectively identifying packet~~  
~~forwarding devices in the stack.~~

8. (Currently Amended) A computer program product, tangibly  
embodied in a computer-readable medium ~~an information carrier~~,  
the computer program product being operable to cause a machine  
to:

receive a packet at a packet forwarding device in a stack  
of packet forwarding devices, wherein the packet is received  
from a source device external to the stack;

at the packet forwarding device that received the packet  
from the source device, processing the received packet to:

identify a destination device external to the stack of  
packet forwarding devices, and

determine whether at least one other packet forwarding  
device is to receive the packet before reaching the identified  
destination device; and

when detecting that the at least one other packet  
forwarding device in the stack is to receive the packet before  
reaching the identified destination device, inserting a vector  
in [[a]] the received packet, wherein the vector includes data  
that identifies a ~~first~~ the identified destination device and  
the at least one other packet forwarding device in [[a]] the  
stack of packet forwarding devices to receive the packet.

9. (Currently Amended) The computer program product of claim 8  
being further operable to cause a machine to:

use the inserted vector and a table to determine a port for  
sending the received packet to the at least one other packet  
forwarding ~~first~~ device in the stack of packet forwarding  
devices.

10. (Currently Amended) The computer program product of claim 9 being further operable to cause a machine to:

copy the received packet; and  
\_\_\_\_\_ [[for]] sending the copy of the received packet through the  
at least one other packet forwarding device in the stack of  
packet forwarding devices ~~a second port identified by using the~~  
~~vector and the table.~~

11. (Currently Amended) The computer program product of claim 8 being further operable to cause a machine to insert the vector  
that includes a bit identifying the first device in the stack of  
packet forwarding devices to receive the packet.

12. (Currently Amended) The [[A]] computer program product of  
claim 8 being further operable to cause a machine to:

remove the inserted vector from the header data of the  
received packet before [[for]] sending the packet to ~~a second~~  
the destination device external to the stack of packet  
forwarding devices.

13. (Currently Amended) The computer program product of claim 8 being further operable to cause a machine to:

\_\_\_\_\_ forward the received packet to the at least one other

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~~packet forwarding device that comprises wherein the first device includes a router.~~

14. (Currently Amended) The computer program product of claim 8 being further operable to cause a machine to:

modifying the vector to identify which of the at least one other packet forwarding device has already received the packet  
~~wherein the vector includes bits respectively identifying packet forwarding devices in the stack.~~

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) A packet forwarding device in a stack of packet forwarding devices, wherein the packet forwarding device comprises~~comprising:~~

an input port for receiving a packet, wherein the packet

includes header data that identifies a destination device;

a switch device connected to the input port, the switch device configured to:

process the header data to obtain the identified destination device when detecting the received packet is entering the stack directly from a source device external to the stack, and

when detecting that at least one other packet forwarding device in the stack is to receive the packet, insert a vector in the received packet that identifies the identified destination device and the at least one other packet forwarding device in the stack of packet forwarding devices to receive the packet; and

an output port connected to the switch device, wherein the output port is configured to forward ~~for delivering~~ the received packet to the at least one other packet forwarding device in the stack; and

~~\_\_\_\_\_ a switch device capable of,~~

~~\_\_\_\_\_ inserting a vector in the received packet that identifies a first device in a stack of packet forwarding devices to receive the packet.~~

22. (Currently Amended) The packet forwarding device of claim 21 wherein the switch device is further configured to capable of:

use using the inserted vector and a table to determine a port for sending the received packet to the at least one other packet forwarding first device in the stack of packet forwarding devices.

23. (Currently Amended) The packet forwarding device of claim 21 wherein the switch device is further configured to capable of:

remove removing the inserted vector from the header data of the received packet before [[for]] sending the packet to a second the destination device external to the stack of packet forwarding devices.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (New) The packet forwarding device of claim 21, wherein the switch device is further configured to:

copy the received packet; and



forward the copy of the received packet to the at least one other packet forwarding device in the stack of packet forwarding devices.

28. (New) The packet forwarding device of claim 21, wherein the switch device is further configured to:

insert the vector that includes a data bit identifying each of the at least one other packet forwarding device in the stack of packet forwarding devices to receive the packet before the destination device.

29. (New) The packet forwarding device of claim 21, wherein the switch device is further configured to:

forward the received packet to the at least one other packet forwarding device that comprises a router.

30. (New) The packet forwarding device of claim 29, wherein the switch device is further configured to:

modify the inserted vector before forwarding the received packet to the at least one other packet forwarding device that comprises a router.

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31. (New) The packet forwarding device of clam 21, wherein the switch device is further configured to modify the vector to identify which of the at least one other packet forwarding device has already received the packet.